



# HEARD ACROSS MONTANA

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## Northern Tier Consortium Meeting Held

By E. Wing Spooner [espooner@mt.gov](mailto:espooner@mt.gov)

The Northern Tier Consortium met on Thurs., April 2 in Havre. Kevin Bruski, IM Executive Director, gave a comprehensive status report on the Northern Tier system, including the current status of the microwave and trunking system.

Sheriff Don Brostrom, Hill County, gave an overview on the recent fleet mapping training and indicated that it was received positively: the training was well worth the time involved, and the instructors did an excellent job. Members discussed the possibility of conducting additional follow-up training within the next month or two. Bill Fleiner, Dept. of Corrections, provided an update on the Sustainability Plan and outlined plans for holding public meetings around the state.

Members also discussed the time frame for the Motorola trunked coverage testing on sites along the eastern end of the Northern Tier. Nora Kennedy, Blackfeet Tribal Nation, gave an update on the Glacier National Park/Blackfeet/Divide Mountain user group meeting. Ronan Telephone is interested in being a partner on this site. User group members discussed Ronan Telephone's possible contribution of a generator, shelter and combiner for local jurisdictions in exchange for access.

The next meeting was set for Thurs., May 7 beginning at 9:00 am at the Great Northern Inn, 1345 1st St., in Havre.

## Mobile Data Assessment Nears Completion

By Scott Bradford [sbradford@mt.gov](mailto:sbradford@mt.gov)

The Mobile Data Terminal (MDT) Consortium needs assessment—funded with Bureau of Justice Assistance (BJA) grant monies through the Public Safety Services Bureau—is nearing completion, according to Northrop Grumman project manager Mark Adams. Mark conducted a review of the needs assessment process and general findings to the meeting of the MDT Consortium held in Bozeman on Thurs., April 2.

Mark provided some preliminary data and led consortium members through an exercise in identifying critical issues for mobile data use and deployment. Several agencies turned in survey forms to be added to the assessment. It was noted that one problem in collecting data was a lack of local agency participation from counties along the Canadian border and in very rural regions.

Response from MDT Consortium members was very good. Northrop Grumman and PSSB utilized Interoperability Montana regional consortia meetings to host orientation sessions and facilitate survey collection and discussion.

The targeted completion of the assessment is April 10. The MDT Consortium appointed a sub-committee led by Great Falls Police Chief Corky Grove to review findings and provide recommendations at the next MDT meeting on May 18. These recommendations will form the foundation for developing short- and long-term strategies for enhancing and deploying mobile data technology around the state. Once finalized, the report and recommendations will be posted on the IM web page.

## Vigilant Guard 2009 Exercise Planning Meeting

By E. Wing Spooner [espooner@mt.gov](mailto:espooner@mt.gov)

Vigilant Guard is a Homeland Security Regional FEMA Exercise hosted by the National Guard along with several local and state agencies. The primary goal is to enhance mutual emergency coordination, response and recovery.

Roger Hays, Lewis and Clark County, and Roger Smith, IM Radio System Administrator, attended a planning session on April 3 at Fort Harrison and discussed ways to integrate the Interoperability Montana trunked radio system into the exercise. Roger Hays will serve as the communications unit leader for the exercise and will be supported by Roger Smith. The exercise will provide an opportunity to test the full functionality of the trunking system to see how it performs in a planned exercise.

The exercise will take place September 15-17.

## Radio Technology Overview

By E. Wing Spooner [espooner@mt.gov](mailto:espooner@mt.gov)

Radio technology is full of confusing terms that sound as though they were lifted directly from an advanced physics book. Here is a quick primer to help our readers understand some radio terminology and concepts related to trunking radio systems.

What is **interoperability**? Ask any police officer or fire fighter and they will tell you that one of the most critical factors in determining the success of their response is the ability to communicate



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instantly, reliably and securely. Responders from all agencies and jurisdictions rely on each other for resources, support and expertise. Their ability to communicate with each other or across disciplines is known as interoperability, and it is key to responder success and safety.

Whenever a person speaks, sound is projected in the form of a sound wave. These waves move at a certain frequency that determines the pitch of the sound. An **analog** radio network transmits the actual wave of a person's voice over the air by modulating it onto a radio frequency carrier. An analog network operates differently from a **digital** network, which converts the vocal sound wave into a digital bit stream of ones and zeros. This information is then sent over the air, and eventually converted back into an analog wave to be heard.

A **conventional** radio network allocates specific frequencies to specific groups of radio users permanently. If nobody in a particular group is transmitting, their assigned frequency sits unused and is essentially wasted. This is in contrast to a trunking network which assigns frequencies to users only when they are needed, which can be more efficient. Interoperability Montana is building a trunking network with a microwave backbone.

**Trunking** refers to a type of communications system that draws from a pool of available frequencies, and assigns them only when they are needed. For example, in the trunked network, when a radio user wishes to talk over the air, they push their transmit button and the system dedicates a frequency to broadcast that user's transmission. After the user lets go of the transmit button, the system can reassign that same frequency to a completely different radio.

A **microwave** backbone connects all major trunking sites through a master zone controller. It also allows remote connectivity through radio base stations and dispatch centers. The **master zone controller** automatically identifies incoming radio calls, identifies the talkgroup that has been selected, determines at which site the talkgroup is registered, and routes the call to the appropriate channel. The master zone controller allows seamless roaming between sites that is transparent to the user. A **talkgroup** is the term given to assigned groups on the trunked radio system. It is an identification of an electronic location where users may communicate with each other. This is very similar to chat rooms on the internet.

## Upcoming Meetings

### April 8

Central Montana Consortium (CMICC)  
Great Falls • 10:00 am  
Wheat Building  
750 6th Street S.W.

### April 13

IM Finance Committee  
Helena • 9:00 am - 12:00 pm  
Anderson ZurMuehlen  
828 Great Northern Blvd.

### April 13

IM Governance Committee  
Helena • Noon - 5:00 pm  
Anderson ZurMuehlen  
828 Great Northern Blvd.

### April 14

IM Project Directors (IMPD) Meeting  
Helena • 9:00 am - 3:00 pm  
MACo Large Conference Rm., Lower Level  
2715 Skyway Drive

### April 15

South Central Montana Consortium (SCMICC)  
White Sulphur Springs • 10:00 am  
Sheriff's Office Training Center, 123 West Crawford

### April 16

I-15/90 Corridor Consortium  
Butte • 10:00 am  
Butte-Silver Bow Chamber  
1000 George St.

### April 20

Western Consortium (WICC)  
Missoula • 10:00 am - 12:00 pm  
Location to be Announced

### April 21

Western Border Interoperability Working Group  
Whitefish • 8:30 am - 4:30 pm  
Grouse Mountain Lodge  
2 Fairway Drive

### April 27

IM Technical Committee Meeting  
Helena • 9:00 am - 3:00 pm  
MACo Large Conference Rm., Lower Level  
2715 Skyway Drive

### April 29

Eastern Tier (ETIC)  
Glendive • 10:00 am  
Dawson County Courthouse Community Room  
207 W. Bell

### April 30

Big Sky 11 Consortium  
Billings • 10:00 am - noon  
Billings Fire Station #1/EOC  
2300 9th Ave N.